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09/404,182	09/24/1999	RAVI S. ADAPATHYA	RP9-99-111	8133

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EXAMINER

ABDULSELAM, ABBAS L

ART UNIT	PAPER NUMBER
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2674

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#10

Please find below and/or attached an Office communication concerning this application or proceeding.

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Paper No. 10

Application Number: 09/404,182  
Filing Date: September 24, 1999  
Appellant(s): RAVI S. ADAPATHYA

Michael E. Noe, Jr.  
For Appellant

**EXAMINER'S ANSWER**

This is in response to appellant's brief on appeal filed January 10, 2002.

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**(1) Real Party in Interest**

A statement identifying the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

A statement identifying that no related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

**(3) Status of Claims**

The statement of the status of the claims contained in the brief is correct.

**(4) Status of Amendments**

The appellant's statement of the status of all amendments is correct.

**(5) Summary of Invention**

The summary of invention contained in the brief is correct.

**(6) Issues**

The appellant's statement of the issues in the brief is correct.

**(7) Grouping of Claims**

Appellant's brief includes a statement that "claims 1-51 stand or fall together as a single group".

**(8) Claims Appealed**

The copy of the appealed claims contained in the Appendix to the brief is correct.

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**(9) Prior Art of Record**

The following is a listing of the prior art of record relied upon in the rejection of claims under appeal.

<u>Patent No.</u>	<u>Inventor</u>	<u>Patent date</u>	<u>Filing Date</u>
5,530,455	Gillick	06-1996	08-1994
6,031,518	Adam	02-2000	05-1997

**(10) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims.

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### Claim Rejections 35 U.S.C. 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gillick (USPN 5530455) in view of Adams (USPN 6031518).

In regards to claims 1, 17, 29, 38, and 47, Gillick teaches a computer mouse with finger buttons including a side button (25), and a roller (24), see Fig 1. Gillick also teaches that the position of a trackball can be extended in any desirable dimension, see column 1, line 45 through 55. Gillick does not teach about a thumb ball support, and a concave thumb channel. However, Adams teaches about a computer mouse with a concave shape of the contact surfaces (29,31), and a user's thumb, see Fig 6, and Column 7, line 15 through 20. Adams also shows the top and the side views of the concave mouse in terms of radial measurement of a sphere, see Column 10, line 40 through 50, and Fig 9, (98). Furthermore, Adams teaches about the assignment of an area needed for right hand thumb, Column 6 line 60 through Column 7 line 20.

Therefore, it would have been obvious to one having skill in the art at the time the invention was made to modify Gillick's device to include Adam's concave shape contact surface for a user's thumb. One would have been motivated in view of the suggestion in Adams that

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concave shape is the same as the desired concave channel, and the thumb support area. The use of concave shape helps comfortably support a wide range of hand sized as taught by Adams.

Regarding claims 5, 10-11, 20, 24-25, 30, 34-35, 42, 44-45, 48, and 50-51, Adams teaches about the curve with respect to the side view, and top view of the mouse, see Figure 5, and Figure 4 respectively. Adam teaches that the slope of the curve varies from the element (88) to a curve dimensions (102) and (100), and the variance of the slope is turn is equivalent to the variance of angles.

Regarding claims 2-4, 8-9, 14-16, 18-19, 23, 27-28, 32-33, 37, 39-40, and 41, Adams teaches the top view, the side view, the back elevation view, and the front elevation view in Fig 4, 5, 9, and 10 respectively. Adams states that the device is contiguous in design and is related to its curve structure, see column 12, line 65, and Column 14 line 10 through 15. Regarding claims 6-7, 12-13, 21-22, 26, 31, 36, 43, 46, and 49, Adams teaches that the periphery of the outer surface (86) in relation to the inner surface (84), and mentioned that the peripheral edge of the upper surface is shaped as round along the junction of top surface, see Column 4, line 15 through 25 and Column 5, line 30 through 40.

#### **(11) Response to Arguments**

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Appellant argues that Adams does not teach or suggest "a thumb button extending from the thumb sidewall and located above thumb channel so that the thumb of the user will be free of contact with the thumb button when the thumb of the user is in the thumb channel." Adams discloses an inner surface (84) with a concave portion having keys (28 30) mounted on the surface. The keys 28 and 30 are defined by the contact surface 29 and 31 respectively. See column 6, lines 49-58. Also, the upper key 30 is located above the user's thumb (108), see Fig 6. Appellant argues the Adams' input device has a top surface not arcuate enough, and further argues that Adams does not teach the desired left, top, bottom, and side views. Adams teaches the thumb (108) as it relates to the side of the device which is a concave inner space. Moreover, Adams teaches that one can have various size and dimensions of the device by scaling up or down its configuration. See column 5, lines 1-5, column 6, lines 51-58, and column 4, lines 14-23, 50-54.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

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